

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028090**Date Inspected:** 31-Jul-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job site**CWI Name:** Julian Razo**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Quality Assurance Inspector (QAI) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

Lift 13E In Process Inspection

The QAI observed ABF QC inspector Salvador Merino perform Magnetic Particle Testing (MT) in way of the lifting lug removal areas on the longitudinal diaphragm web at E3, a 60mm linear indication was observed. After the removal of the indication by grinding, ABF welding personnel proceeded to weld the excavated base metal without the prior approval of the engineer. The final depth of the excavation in the web was measured to be 6mm. The lifting lug removal area is located at lift 13E, East of panel point 121.5. The longitudinal diaphragm web is designated as a Seismic Performance Critical Member (SPCM) on the contract drawings and requires through thickness properties (TTP). The QAI's observations were discussed with the QA lead inspector Danny Reyes.

Lift 13W In Process Inspection

The QA inspector periodically observed ABF/JV qualified welder Lin Yun #9344 performing Shielded Metal Arc Welding (SMAW) in the 2F position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-F1200A. The welding observed was for the longitudinal diaphragm stiffener fillet weld connection. The weld surface and surrounding area was brought to temperature by the use of a gas torch and the preheat temperature was confirmed ABF personnel prior to welding.

The QAI observed at random intervals ABF QC inspector John Pagliero performing Ultrasonic Testing of the

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K-plate to longitudinal deck stiffener connection at panel point 120.5. A total of two (2) rejectable indications were observed to be marked for repair at the time of inspection.

The QA inspector periodically observed, ABF/JV qualified welder Xiao Hua Luo # 1291 performing Shielded Metal Arc Welding (SMAW) in the 4G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1162-4. The welding observed was for the HPS-485 longitudinal stiffener wing plate attachment welds located between panel points 124.5 and 125 at LS2. The weld is a Partial Penetration Tee joint. The weld surface and surrounding area was brought to temperature by the use of induction heaters and the preheat temperature was confirmed ABF personnel prior to welding.

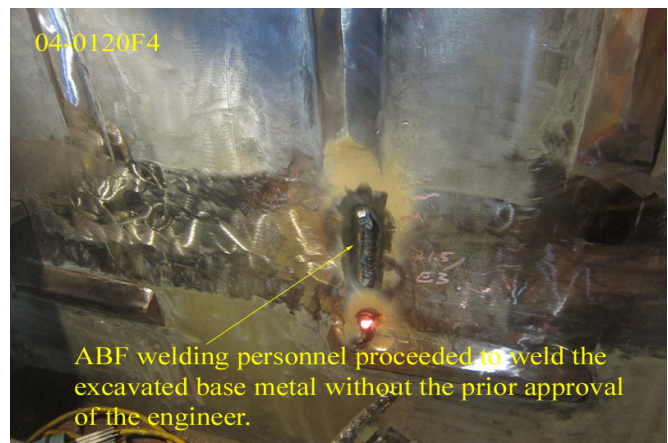
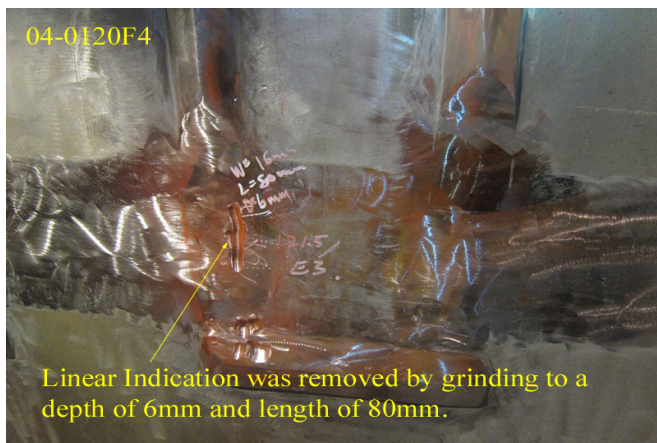
The QA inspector noted and periodically observed ABF/JV qualified welder Rick Clayborn #2773 performing Carbon Arc Gouging (CAG) in the overhead position for the repair of the deck drop-in splice between panel point 122~122.5 designated as 13W-W2.1. The weld surface and surrounding area was brought to temperature by the use of induction heaters prior to gouging. The weld will be re-gouged 100% due to the amount of indications found during the ABF QC final Ultrasonic Testing inspection. The repairs at this location are being conducted in accordance with RWR-201207-016.

The QAI spent a portion of this shift reviewing and documenting the status and completion of various production welding tracking logs for lift 13E/14E drop-in deck work currently in-process. The QA recorded the information on the OBG tracking log.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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Inspected By: Patterson,Rodney

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer